Presentation to the

Committee of Inquiry

on

CROW BENEFIT PAYMENT

by

The Province of Manitoba

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EXECUTIVE SUMMARY

The WGTA was enacted by the Parliament of Canada to "facilitate the transportation, shipping and handling of western grain...". The WGTA is a transportation act, and the funds appropriated by Parliament under the Act are applied to assist in defraying the costs of transporting western grain. The various schemes that have been put forward in recent years to distribute the funds in other ways are not consistent with the Act. In effect, the proponents of these schemes advance the proposition that there are better ways to spend that money; some go so far as saying that subsidizing transportation is harmful. Yet they claim to have an 'entitlement' to the money provided in the WGTA on the grounds that it compensates for a benefit lost when the Crow rate was abolished. One may wonder how the repeal of a privilege that was harmful or not helpful can give rise to claims for compensation. We are afraid that if the funds were distributed in western Canada for purposes other than to assist in the transportation of grain, the recipients of those funds and those who represent them in parliament would be asked by other groups in society to explain the purposes of the grants, to what uses the grants were put and what priority should be attached to those grants relative to other demands made upon the public treasury. We would expect those questions to be raised with growing urgency as the years pass by, and we would expect the answers coming from the recipients to become less convincing with every passing year. In our opinion, the Canadian public will continue to view public assistance to transport western grain to export markets as reasonable; we doubt that the public will consider it equally reasonable to send, year after year, large sums of money to individuals who do not have to demonstrate the need for it or the purpose to which it will be put.

We have no hesitation in stating that the so-called resource neutrality is a phoney issue. By definition, supporting any person or cause means that one is not neutral towards the interest of the person or cause.

Support for grain producers must not be construed as lack of support for or hostility towards livestock producers. While it may be argued that an increase in transportation rates would cause a decrease in local grain prices, we can state categorically that the existence of the Crow rate has never been the deciding factor or even a significant factor in the profitability or unprofitability of livestock production. The historical record of prices of livestock and feed grain shows that the prices of both fluctuate so frequently and so widely that the presence of a 10% upward bias in the price of feed grain is insignificant.

In our opinion the payment of the subsidies directly to the railways is the best way to ensure the efficient operation of the transportation system. Payment to the railways lowers the rates, encourages use, increases the volume handled and thereby reduces costs per unit, which is the standard definition of efficiency. If the subsidy is paid to farmers independent of their use of transportation services, the higher transportation rates discourage use of the transportation system, lower the volume handled and increase the costs per unit. Hence payment to farmers reduces efficiency of the transportation system.

We realize that if the Crow benefit were paid to farmers and if transportation rates would be raised in consequence thereof, farmers as grain shippers would become more sensitive to variable rates. This would enhance the flexibility of railway management to employ variable or incentive rates to encourage the use of some delivery points and to discourage the use of others. Changing the method of payment of the Crow benefit would thus become a powerful instrument in the hands of the railway companies to cause the abandonment of branchlines, the closure of elevators and the demise of some rural communities. Indeed, we are well aware of the fact that there are many who consider the combination of payment-to-farmers and variable rates as indispensible toward "streamlining and rationalizing" the railway system.

It needs hardly to be emphasized that the Government of Manitoba does not subscribe to this view of efficiency and is strongly opposed to the manipulation of public funds in order to achieve the dismantling of part of the transportation system which those funds were meant to improve and maintain. It may well be that the railways can move 20 million tonnes of grain through 50 or 100 delivery points more efficiently than 35 million tonnes through 1000 delivery points, and that railway management aims to achieve the leaner system. However, such gains in railway efficiency would be made at the expense of the rural communities and would be contrary to government policy objectives of increasing output and income from agricultural production.

A substantial part of our submission has been devoted to discussing studies done by Agriculture Canada purporting to show that ending the Crow rate and/or paying the Crow benefit to farmers would be beneficial to all groups concerned. We are confident that we have proven that their assumptions were shakey, their logic faulty and their conclusions unwarranted and unreliable. We have drawn attention to the fact that Agriculture Canada's findings are at variance with the findings of studies conducted by the University of Manitoba, Chase Econometrics and others. We wish to re-emphasize that the projections obtained through the econometric models are predicated upon so many assumptions that their reliability approaches zero.

Based upon the record of performance of Manitoba's grain, cattle and hog sectors through good times and bad, we can say with confidence that continuing to pay the subsidy to the railways as provided for in the WGTA will not seriously affect the viability and growth of our livestock industry, and that paying the Crow benefit to farmers would have no significant impact on the overall output of Manitoba's agriculture. Straight grain producers would lose some; straight livestock producers would gain some; farmers who feed all of the grain they produce to their own livestock would be unaffected. However, we do not think that the once-for-all drop in grain prices would be

sufficient to provide a lasting stimulus for expansion of livestock production. Profitability of beef and hog production would only be marginally affected and the change would not bring what the industry needs most: stability.

We have been concerned that claims regarding the potential impact of a change in the method of payment were highly exaggerated, and might tend to raise false expectations. They also might tend to create division between grain producers and livestock producers. We think that it is unfortunate, and we see it as our duty to promote information that puts the issue in perspective.

We are also seriously concerned that cutting the subsidy loose from grain transportation may threaten its permanence. We think that producers should take that possibility into consideration.

Finally, the Government of Manitoba has very strong views on the maintenance and protection of railway branch lines. We will oppose any attempts to use the method of payment in combination with variable rates to force the closure of elevators and the abandonment of branch lines.

The Government of Manitoba is conscious of the fact that the WGTA is an act of the Parliament of Canada and that Parliament has the undisputed prerogative to appropriate funds and to decide on the method of their distribution. We appreciate being invited to express our opinion on the method of payment of the Crow benefit. Having weighed all of the relevant factors, and having taken into account the long run interests of the grain and livestock producers of this province, we recommend that the payment of the Crow benefit continue to be made as presently provided for in the Western Grain Transportation Act.

I. Introduction

The Government of Manitoba was in favour of retaining the Crow Rate and was opposed to Bill C-155 which relieved the railway companies from their historic obligation to transport western grain at rates agreed upon at the turn of the century. The Western Grain Transportation Act (WGTA) turned the obligation of the railways to the country and the western grain producers into an obligation of the taxpayers and the farmers to guarantee annual profits to the railways.

The rationale given for this massive shift in obligations is that the railway companies need the money to restore, upgrade, expand and re-equip the railway system so that it can handle the expected large increases in the volume of resource products in the years to come. As well, the argument has been put forward in recent years that abolishing the Crow rate is good for Western Canada because higher transportation costs will result in lower grain prices, which will make the production of livestock more attractive which, in turn, will result in the growth of the meat processing industry. However, this can only be viewed as a subsidiary or supporting argument and not as a firm reason for enacting the WGTA, which was enacted by Parliament as "An Act to facilitiate the transportation, shipping and handling of western grain...".

Before addressing the specific items in the Committee's terms of reference it is useful to identify the major groups that have taken a strong position on the method-of-payment issue, and their reasons for taking that position.

Foremost among the groups who want the subsidy paid to the railway companies are the three Wheat Pools. Payment to the railways being the "least change" from the Crow rate regime is the least threatening to the structure and traditional method of operation

of the pool organizations. It is understandable, therefore, that the pools have adopted that position and that their position is strongly supported by their membership (only 10% of the replies to the Saskatchewan Wheat Pool questionnaire in late 1982 favoured payment to producers). Payment to the railways also minimizes the potential impact of variable rates on grain delivery patterns, which are naturally of great concern to the pools. As well, payment to the railways means that the subsidy is an indirect subsidy, far less visible than a direct subsidy openly paid to farmers. The pools are afraid that a direct, visible farm subsidy would be more susceptible to political pressures and would, therefore, be less secure than an indirect, less visible subsidy. Finally, subsidies paid direct to farmers, and divorced from grain shipments would inevitably be spread over more farmers and thus reduce the amount received by grain producing and grain shipping farmers who make up the membership of the three wheat pools. When all these factors are considered it is easy to understand why the pools lobbied so strenuously to have the subsidy paid to the railway companies.

L'Union des Producteurs Agricoles du Quebec (UPA) also insists that the Crow benefit must be paid to the railway companies. UPA sees the Crow rate and its successor the Crow benefit as a transportation subsidy for the western grain producers, a subsidy which is not matched by an equivalent program for farmers in central and Atlantic Canada. UPA takes the position that if western farmers think that the grain transportation subsidy causes a distortion in western agriculture, then the appropriate remedy is to do away with the subsidy; paying the subsidy to all western farmers whether they grow and ship grain or not would only compound the problem and aggravate the inequality of treatment of western and eastern farmers. By and large, the UPA view is shared by farm organizations in Ontario and Atlantic Canada.

The railway companies have two reasons for preferring that the subsidy be paid to the farmers. The first reason they give is that the subsidy is a subsidy for the grain producers and not for the railways and it should be paid to the intended beneficiaries. CN and CP Rail do not wish to be seen to be receiving large sums of money from the Government of Canada.

The recipients of highly visible subsidies may from time to time be put in the embarrassing position to explain to the media and to the public why the government is so generous to them, particularly in years when their profits seem satisfactory. At such times public opinion may exert pressure upon the government to reduce or terminate the subsidy payments. Hence the railway companies would rather collect their payment directly from their customers.

The second reason for preferring to collect payment directly from the customers is that it would make shippers more sensitive to differences in rates between different points and, eventually, variations in rates which the railways may introduce such as volume discounts. As long as the federal government pays 75% of the freight costs directly to the railways, only 25% of any rate variations will be 'visible' to farmers as differences in out-of-pocket expenses. By divorcing the subsidy from transportation and letting the railways collect the full costs of the freight, farmers will become more sensitive to rate variations, and will thus become more sensitive to potential savings which might be achieved through system rationalization. Thus farmers might become more sympathetic - or at least less hostile - to the closing of delivery points and the abandonment of rail branch lines. Hence, paying the subsidy to the farmers is favoured by the railway companies because they could more effectively employ incentive rates to achieve system rationalization.

Finally, there are farmers and farm groups in Western Canada who want the Crow benefit to be paid to farmers. They favour payment of the Crow benefit to the farmers because if grain producers were made to pay the full costs of transportation the price of grain in the prairie region would be reduced by an amount equivalent to the increase in the freight rate. Livestock producers would therefore experience a decline in the cost of production, both absolutely and relative to livestock producers in other parts of Canada. These organizations have put forth the argument that the Crow rate and payment of the Crow benefit to the railway companies cause grain prices in the region to be artificially high and thus create a distortion to the disadvantage of livestock producers. Their supporters have advanced the argument of resource neutrality which is the first item in the criteria and the terms of reference of the Committee.

II. Criteria

Under the Terms of Reference the Committee is charged to:

> "... assess and make recommendations on who should receive the government funds as provided for in thw WGTA and by what means and manner should these funds be distributed."

It should perhaps be emphasized that the funds whose distribution is at issue are the funds provided for under the WGTA, which is an act to facilitate the transportation, shipping and handling of western grain, and that the amount of funds to be distributed in any one year depends upon the volume of grain shipped in that year multiplied by the transportation cost per tonne. In short, the funds to be distributed are a transportation subsidy. It is important to keep this in mind because some of those advocating payment of the subsidy to farmers seem to have a different purpose in mind. This is particularly true of those who have coined the phrase "resource neutrality".

A. Resource Neutrality

Under this heading the Committee's Terms of Reference read:

> "The method of payment should not deter the influence of market forces in determining production and marketing patterns in Canadian agriculture."

That statement is open to many interpretations. Although subsidies influence production and marketing decisions they do not necessarily deter or prevent market forces from making their influence felt. For example, the fact that the transportation of Western grain is subsidized does not prevent the world markets for the various grains from making their influence felt on western grain producers. Taken in that sense, the present method of paying the subsidy to the railway companies meets the criterion of resource neutrality. Paying the subsidy for transporting grain to the farmers instead of to the railway companies would have no effect on the production and marketing decisions of the farmers. As long as the subsidy is tied to the amount of grain shipped by a producer it does not matter whether the government pays the subsidy to the railway company or whether it reimburses the producer after he has paid the freight bill. Hence, if resource neutrality is viewed within the context of the present WGTA it is not an issue at all.

However, that is not how most persons and groups advocating a change in the method of paying the subsidy view resource neutrality. Their attitude is that the Crow rate in the past and the WGTA at present supports the transportation of grain out of the region and by doing so favours the production of grain for export over livestock production, or, as some would say, favours the grain producers over the livestock producers. By urging a change in the method of payment they hope to promote the livestock industry and secondary processing in

western Canada. To further their purpose they are trying to persuade the Canadian taxpayers that instead of helping the railway companies to expand and upgrade their transportation system they might as well give the money to western farmers and let them do with it as they please. It is not clear whether the advocates of payments to farmers expect that most of the money would end up in the coffers of the railways anyway (in which case it would have made an administratively complex and costly circuit). However, the better the purposes of the payment-to-farmers method were achieved, the less money would end up with the railways, thus defeating the original purposes for ending the Crow rate. As one farmer from the Grandview area put it before the Standing Committee on Agriculture of the Legislative Assembly in Manitoba:

> "... the only reason that we agreed to re-negotiate the Crow was to allow for a revitalization of the railways..."
>
> "... then we proceeded to Dr. Gilson's comprehensive solution. It would revitalize the rail system but, in addition, it would redesign the whole agricultural economy of Western Canada by encouraging the growth and expansion of secondary processing and value added industries as well as the livestock industry. How is that to be achieved? Clearly by lowering the farm gate price of statutory grain. That's how it is going to be done, in fact, by removing part, if not all, of the economic incentive for production of the very commodities that we are revitalizing the railways to carry. How can you come around in a circle more than that?"

It is obvious that a major problem with the payment to producers proposal is that logic does not support it. Its advocates must provide a different justification for the annual payment of $658.6 million by the Canadian taxpayers. They have hit upon the rationale "resource - neutrality". In that rationale government subsidies must not favour the production of grains for export over the production of livestock or over

the production of grains for local processing. Although the rationale contains a degree of plausibility, it also has some serious flaws.

1. In the first place there is no sacred rule that government subsidies must be resource neutral. Indeed, the only resource neutral subsidy is no subsidy at all. The purpose of all government subsidies and tax incentives is to give support to certain activities, and hence to disturb neutrality. By definition, if one supports something one is not neutral. If the government wants to be neutral in economic affairs and does not want to influence decisions in economic matters by individuals and corporations it must not subsidize anybody or any economic activity and it must tax all persons and all activities equally. The welter of subsidy programs and the complexity of the Income Tax Act are conclusive if not eloquent testimony that governments are not neutral. To invoke the principle of resource neutrality in the distribution of government subsidies is not altogether convincing.

2. In the second place, if resource neutrality is the major criterion in the distribution of government subsidies farmers in other parts of Canada may want to share in the munificence of the federal government. It can hardly be argued that annual payments of $658 million plus to western farmers do not disturb the federal government's neutrality between eastern and western farmers or that they do not influence agricultural resource use in eastern and western Canada. Adopting resource neutrality as a principle in the distribution of the so-called Crow benefit may help to shorten the life of the subsidy program.

3. Thirdly, it is not altogether clear how resource neutrality is to be defined or interpreted even within western Canada. Dr. Gilson's report only says that resource neutrality will be achieved by 1989-90 when 80% of the Crow benefit is paid to producers and when the producers will pay nearly the compensatory rate to ship their grain. In effect, Dr. Gilson equates resource neutrality with a farm gate price for grain which reflects the full cost (or 80% thereof) of transportation to point of export. His calculation of the agricultural adjustment shortfall which he proposes be paid by the federal government as an interim measure makes that abundantly clear.

One of the few detailed proposals for a method of payment to farmers has been developed by Westburn Consultants on behalf of the late Manitoba Farm Bureau and various livestock and poultry associations in Manitoba. Unfortunately, in trying to satisfy all sides in the dispute the Westburn proposal obscures the meaning of resource neutrality; as well, the proposal contains some internal inconsistencies. The one definite consequence of the Westburn proposal is that agricultural adjustment payments would become permanent, in other words, more money would be needed.

Westburn Consultants create logical problems for themselves and financial problems for the federal government by insisting that the full Crow benefit be allocated to the grain producers - 20% by payment to the railways and 80% by payment to the "grain producers". This is portrayed as an 'entitlement' in recognition of the loss of the Crow rate as estimated by Gilson for the 1981-82 crop year. If the Crow rate created an unwarranted distortion the logical solution in the Gilson example would be to spread the Crow

benefit over 38.4 million tonnes rather than over 30.4 million tonnes of grain, provided that an administrative means could be found to do it.

More important, however, is the fact that both Gilson and Westburn pass over the difficult question of defining who the producers are that are 'entitled' to the Crow benefit. While Gilson ignores the administrative problems completely, Westburn proposes that the entitlement be based on the larger of a producer's average shipments in the 1977/78 - 1981/82 period or the productive capacity of the land he presently farms. The question must be asked, "is the entitlement to the producer or is it to the land?". If it is to the producer one would think that the entitlement ends when the producer quits unless the entitlement enures to his heirs. In that connection it may be observed that some 25% of the persons who were farming in Manitoba in 1976 were no longer farming in 1981. If the entitlement were personal the Crow benefit would decline year by year and would disappear within a generation. Obviously, that is not what Westburn means, but it should be clear that his either/or makes no sense.

Not only is there a considerable turnover among farmers, few farmers operate on fixed acreage over long periods of time. While young farmers tend to expand, older farmers tend to contract their acreage. To provide farmers with an 'entitlement' that is the greater of past grain deliveries or present acreage adjusted for productivity is, therefore, not logical, and in Westburn's proposal requires supplementary subsidies.

The consultants would have been on more solid ground if they had argued that the effect of the Crow rate had been to raise the capital value of land in western Canada, not only of land in grain production but, because land has alternate uses, of all land with agricultural potential. If, and only if, it could then be shown that western agriculture had a 'right' to the Crow rate the conclusion might be warranted that the owners of land had a right to compensation - entitlement - if the Crow rate were withdrawn. If the west had no absolute right to the Crow rate, a logical case can still be made that any compensation the federal government might be willing to pay should be distributed on the basis of land ownership. However, it is clear that the Crow benefit is not and is not intended to be a compensation for the decline in the potential value of agricultural land in western Canada but rather an ongoing commitment of the federal government to assist in the transportation of grain. Therefore, it is difficult to prove entitlement to share in the Crow benefit on the basis of land ownership, and even more difficult to prove a rightful claim to agricultural adjustment payments.

4. Westburn's method to calculate the farmer's entitlement is also evidence that the consultants recognize the Crow benefit as a grain transportation subsidy (they even call it Freight Rate Entitlement). The result is by no means 'resource-neutral' since the size of the entitlement depends upon the productivity of the land and the distance from port. The more productive the land the greater the subsidy - that is hardly neutral. What the consultants try to achieve is simple, to lower the price of grain on the Prairies relative to the price of grain at port of export or in central Canada. In order to achieve that goal the

> grain producer somehow has to be made to pay the full cost of transportation of his grain. The difficulty is how to do away with a grain transportation subsidy without doing away with the subsidy.

It is perhaps not superfluous to observe, in conclusion, that governments do not have to have logic on their side in order to grant subsidies, or that they have to adhere to some principle such as resource neutrality in order to distribute largesse. Economic consultants who advocate a certain course of action on the basis of a high sounding principle merely invite other economists to search for flaws in the principle or its application. To point to the weak spots in Gilson's and Westburn's proposals for payment to producers does, therefore, not necessarily imply opposition to their proposals as such. The real question is, do we like the results which are likely to flow from the proposals. That question is, of course, further discussed in this submission.

B. Equity

Under this heading the Terms of Reference read:

> "The method of payment should ensure that government funds are distributed in an equitable manner in terms both of the recipients and their share of those funds."

When discussing equity it is particularly important to remind ourselves that we are talking about the distribution of funds as provided for in the Western Grain Transportation Act, an "Act to facilitate the transportation, shipping and handling of western grains ...". If the full title of the Act and its provisions are taken at face value one must conclude that all of the money is intended to subsidize the transportation of

western grain, and that payment of the subsidy to the railways ensures that that is done. The only equity issues would arise from questions about the fairness of the base rate scale (Section 34 and Schedule II of the Act), about the fairness of the CN adjustment (Section 56) and about fair and equal treatment of BC Rail. Although there may be some quibbling over these questions, a very broad concensus appears to exist that in principle these matters have been settled in an equitable manner. Hence within the context of the WGTA there are no great outstanding issues of equity arising from the method of payment.

However, if payment of the Crow benefit is divorced from the transportation of grain, questions about the equity of the subsidy may be raised for which there appear to be no ready answers. Heading the list may be the question of whether the citizens of Canada have an obligation to pay to the farmers of western Canada a very large sum of money every year regardless of the economic circumstances of either the payers or the payees, the citizens or the farmers. Equity between eastern and western farmers may be next on the list, followed by questions of equity among western farmers: large farmers versus small farmers, farmers on good land versus farmers on poor land, land owners versus tenants. In short, divorcing the Crow benefit from the transportation of grain inevitably raises the question of its purpose: What is the justification of the subsidy and what is it supposed to accomplish if it is not intended to support the transportation of grain?

C. <u>Efficiency</u>

> "The method of payment should not prevent freight rates from encouraging the efficient use of the grain transportation and handling system."

The effect of a subsidy on any good or service is to increase the quantity demanded or consumed. Subsidizing the transportation of western grain results, therefore, in more grain being transported than would be the case without subsidy.

Because fixed costs account for a large proportion of total costs in railway transport, costs per unit transported decline as the volume shipped increases. To the extent that the transportation subsidy causes an increase in the volume of grain shipped the subsidy reduces the per-unit costs of rail transportation and thus improves the efficiency of the grain transportation and handling system.

If the subsidy is paid directly to the railways on the basis of volume moved, all of it will contribute to lowering the per unit transportation cost, and all of it will, therefore, contribute to the efficient use of the transportation system.

The same beneficial result on grain transportation costs will not obtain if the subsidy is paid to farmers irrespective of whether they ship grain. Taking into account the cultivated land not used to grow grain as defined in Schedule I of the WGTA, plus the grain produced but not shipped out of the region, between 35% and 40% of the Crow benefit might not find its way back to the transportation system. How the estimate is derived is shown in the Appendix.

On the basis of 1981-82 costs and shipments of 31,500,000 tonnes total eligible transportation costs of the railway companies are $812.7 million of which the government pays $658.6 million and the farmers $154.1 million. As long as payment is made directly to the railways the federal government will pay $20.91 and the farmers $4.89 per tonne of grain

shipped. The transportation subsidy is between 10% and 14% of the weighted average market price of grain at point of export, which is a considerable incentive to use the rail transportation system.

If 80% of the Crow benefit is paid to farmers on the basis of cultivated acres the average transportation charge to the farmers will become $21.62 per tonne and the government will pay the railways $4.18 per tonne. If the increase in the price of transportation does not lead to a decline in the volume shipped the change in the method of payment will not have affected the efficiency of the railway system.

However, it is reasonable to expect that the volume of grain transportation services demanded will decline if the freight rate increases from $4.89 to $21.62 per tonne. The increase in the price of transportation will cause a corresponding decrease in the local price of grain. The drop in price may be expected to cause an increase in the quantity demanded in the local market. (This, of course, is the very reason for advocating payment of the Crow benefit to farmers). It is also reasonable to expect that the decline in the price of grain will lead to a decline in the amount of grain produced. With less grain produced and more grain consumed locally the volume of grain shipped by rail is bound to decline. A decline in volume transported implies less efficient use of the railway system and higher per unit costs.

On the other hand, the drastic increase in the price of transportation may tend to make farmers more sensitive to variations in rates the railway companies may offer at different shipping points. As long as payment of the Crow benefit is made to the railways, three quarters of any rate variation is absorbed by the subsidy. If the subsidy is paid to farmers, rate variations will be more significant to

farmers/shippers and their response to rate variations is likely to be greater. Greater responsiveness to rate variations enhances the flexibility of railway management which may result in improved system efficiency.

Unfortunately, it is not possible to determine conclusively whether greater management flexibility to obtain system efficiencies through rate variations would be sufficient to offset the negative impact on railway efficiency due to declining volumes resulting from higher transportation prices. The study team of Olson, Tyrchniewicz and Framingham concluded that increasing rail transport costs to 4 times Crow and putting into effect the branch line rationalization recommended by the Prairie Rail Action Committee would result in lowering grain deliveries in Manitoba by 5.2%. If a similar reduction in deliveries would result from paying 80% of the Crow benefit to farmers (which would result in average transportation costs of 4.4 times Crow) the total volume moved would decline to 29.86 million tonnes from 31.5 million tonnes.

It may well be that the railways can move 29.8 million tonnes more efficiently on a reduced rail network than 31.5 million tonnes on a somewhat larger network. It may also be that the railways can achieve still lower cost per unit by moving not more than 20 million or 25 million tonnes on a sharply reduced network and only 40 delivery points, as indeed was suggested in the early 1970's. However, at some point the gains in railway efficiency will be outweighed by the losses in gross domestic product and net national income.

It seems reasonable to conclude that payment of the subsidy to farmers would lead to higher per unit costs of railway transportation (and hence a loss of efficiency) unless the change in the method of payment were accompanied by branch line abandonment. In other words, a change in the method of payment

is a rational argument in support of trimming down and streamlining the railway network. That may be desirable from the point of view of a railway systems manager. However, public policy objectives of raising gross output and net income from farming would be ill served by a change in the method of payment.

D. Administrative Feasibility

Additional administrative costs will be incurred if the Crow benefit is paid to farmers rather than to the railways. All of these costs will be in excess of the present cost of administering the WGTA because there are no off-setting savings, and in that sense a change in the method of payment will result in 'excessive' administrative costs. However, if compared with the total administrative costs of government, or compared with the total cost of the subsidy the cost of administering a system of payments to farmers would probably not be excessive.

However, one should not underestimate the difficulties involved in devising a system which would, in effect, compare each parcel of land (a quarter section has been mentioned as the unit) with every other parcel in Western Canada and which would assign a productivity (and freight rate zone) index to each parcel. While it has been said that the provincial crop insurance corporations already have a productivity classification system in place, the system suffers from inaccuracies and is subject to revisions on an ongoing basis. For example, productivity indices were recently reviewed on 996 quarter sections of land in southwestern Manitoba; revisions were made to the productivity indices of 586 of these quarter sections, a revision rate of nearly 60%.

Bias and/or inaccuracy in the crop insurance rating system may cause disputes over premiums, discounts or coverage. While such disputes are not desirable they may nevertheless be acceptable to governments because crop insurance is, in the final analysis, a voluntary program. Farmers who disagree with the crop insurance corporation over the risk and productivity rating of their land may simply decide not to take part in the program. That does not necessarily imply that such farmers feel ill treated by the insurance corporation or the government responsible for its operations. Quite often the contrary view prevails, namely, that crop insurance must be 'sold', that an effort must be made to get farmers to 'buy' crop insurance, even though it is heavily subsidized and thus falls in the category of public benefit. Because of that prevailing view it is not surprising that low participation rates in certain parts of the province are seldom considered to be unfair and discriminatory treatment of farmers in those areas, although logic would lead one to conclude that unequal treatment is precisely what low participation rates reflect.

However, such benign attitudes must not be expected to prevail if crop insurance risk and productivity ratings are used to determine individual shares of an annuity which the federal government has promised to pay in perpetuity. The risk and productivity rating translates into an annual payment per acre and is thus of direct financial concern to the individual who farms the parcel of land. As well, the size of the annual payment per acre of a particular parcel of land may in the future serve as an official and unambiguous rating of the relative value of the land, and may thus have an unmistakable impact on the sales value of the land. With so much at stake disputes over productivity ratings are likely to be bitter.

III. Agricultural Impacts

Payment of the Crow benefit to farmers will result in lower farm gate prices for statutory grains; this will affect the gross and net receipts of grain producers, livestock producers and oilseed processors. If the change in the method of payment is accompanied by an amendment to the WGTA which would permit more freedom to the railways in the setting of rates - 'variable rates' - the repercussions would be felt far beyond the agricultural industry.

A. Impact on Freight Rates and on Grain Shippers

For the sake of simplicity we will assume that the Crow Benefit payment will be based, as in the Westburn proposal, on 80% of the total Crow Benefit (20% being paid to the railways) and will amount to $16.75 per tonne on average for the prairie producer. We will use an adjustment factor of about .75 based on 1980 - 81 deliveries so that in Manitoba the average Crow Benefit would be $12.57 per tonne. Also, we have based our calculations on the assumption that there will be no change in the total volume shipped and no changes in total system costs. We will further work on the generally accepted assumption that if the Crow benefit were paid to farmers, the freight rate charged at the elevator would increase by a similar amount and that the farm gate prices of statutory grains would decline by that amount (although that assumption perhaps ought to be qualified). The critical assumption in the pay-the-farmer proposal is that the payment would not be tied to grain shipments so that the subsidy would not interfere with the farmer's decision on whether to ship grain, to sell it locally or to feed it to livestock on his farm.

The WGTA prescribes the procedure for determining the freight rate. Changing the method of payment should not affect the

method of determining the freight rate nor the level of the rate, provided that a change in the method of payment does not affect the volume of grain shipped.

In the following calculations to estimate the impact on the net out-of-pocket costs to statutory grain shippers we have assumed a constant volume of 31,500,000 tonnes so that the average freight rate is also held constant at $25.80 per tonne, of which the farmers presently pay $4.89 per tonne and the Crow benefit of $20.91 per tonne is presently paid by the federal government.

According to 1981 census data approximately 38 million hectares were classified as improved land in western Canada, of which 83 percent or 31 million hectares were devoted to the production of statutory grain and to summer fallow. Over the past 10 years, an average of 72.8% of the statutory grain produced in western Canada was marketed through the licensed elevator system. It follows that, if payment of the Crow benefit were based on the area of improved land, (.83)(.728) = 60.5% of the Crow benefit would accrue to land devoted to the production of statutory grain, and the "dilution" or "slippage" factor would be 39.5%. If 80% of the Crow benefit were paid to farmers the dilution would amount to $208,117,600 (for details of calculation see Appendix).

Hence total out-of-pocket costs to statutory grain shippers would be $208 million annually. If volume shipped is held constant at 31,500,000 tonnes the average out-of-pocket costs to statutory grain shippers would be $6.61 per tonne of grain shipped.

In Manitoba, agricultural land devoted to producing WGTA grain (including summer fallow) accounted for 81.8% of the total improved area in 1981. According to the Canada Grains

Council's statistical handbook producers' marketings of the six major grains through the licensed elevator system accounted, on average, for 61% of production during the period 1972/73 to 1981/82. Hence, if the subsidy were paid to farmers on the basis of improved acreage, only (.61)(.818) or 50% of it would actually accrue to the shippers of statutory grains.

Assuming that Manitoba maintains its 14.8% share of total grain shipments, and that the average base rate in Manitoba is 75% of the Prairie average, Manitoba's share of the Crow benefit is:

(.148)(.75)(.8)($658,600,000) = $58,483,600

Total out-of-pocket costs to statutory grain shippers in the province would be $29 million and the out-of-pocket loss would be $6.27 per tonne.

B. <u>The Effects on Realized Farm Gate Prices for Grains in Both Western and Eastern Canada</u>

It is commonly assumed that the immediate or short-term effect of paying the subsidy to farmers would be that for the prairie region the prices of the statutory grains would decline on average by $16.75 per tonne. In Manitoba the average price decline would be $12.56 per tonne.

Although our calculations are also based on that assumption, a qualifying statement may be in order. The assumption implies that the decline in prices has no effect on the volume of the grain farmers are willing to produce and/or that Canadian supply has no effect on market price. These conditions will not hold at all times or for all grains. Where Canadian production accounts for a large share of international trade such as in canola and flaxseed, Canadian supplies will have an

effect on market prices, and some of the increased transportation costs incurred by farmers will likely be passed on to the buyers. Secondly, the increase in transportation costs may result in a shift of production from barley to wheat, a decline in local or regional feed grain supplies and a rise in local/regional feed grain prices relative to international prices.

There is no reason to believe that a change in the method of paying the Crow benefit would affect the prices of grains in eastern Canada. Typically western grain selling prices are quoted in store Thunder Bay. To the purchaser of grain it makes little difference who paid the transportation costs from the country elevator to Thunder Bay. For the seller of western grain, be that the Canadian Wheat Board or a private grain merchant, a change in the method of paying the subsidy does not alter the market conditions that determine the prices of western grains - world demand and supply conditions, prices in the U.S. and the exchange rate of the Canadian dollar. The same U.S. and world market conditions would also continue to be the principal determinants of farm gate prices of grains produced in central and eastern Canada.

Over the longer term there would be shifts in production of the various grains in the prairie provinces which in turn would have an effect on relative prices.

C. The Impacts on Western and Eastern Agricultural Outputs

1. General Productivity

If 80% of the Crow benefit is paid to farmers on the basis of improved land, $526,880,000 would be distributed annually to about 155,000 farmers who would receive about $14 per hectare of improved land. If the payments are made

to the farmers rather than to the landowners, about 24% of the subsidies would go to the 6% of the farmers who farm more than 1,600 acres of improved land. Those 9,100 farmers would receive average Crow benefit payments of about $14,000 per year. Annual payments to the next largest group, those farming between 1,120 and 1,600 acres of improved land would be about $7,500 on average while those farming between 760 and 1,120 acres would receive payments averaging about $5,150 per year. Together these three groups which make up 28% of the farmers would receive 63% of the annual payments.

It is impossible to predict what such large, no-strings-attached payments would do to the productivity of the recipients. One would like to have answers to questions such as the following:

- How, if at all, do responses change as the size of the annual benefit changes?

- How many (what percentage) of the recipients will consider the annual payment as a sure source of income - a safety cushion - and will be induced by it to take greater risk, be more aggressive and probably more productive in their farming operations?

- What proportion of the recipients, being assured of an annual income, will be led to play it safe and assume lower risks, reduce their inputs and become perhaps less productive?

- Would some recipients decide to "take a year off" if the market outlook were decidedly unfavourable?

- Would responses differ among age groups?

- Would responses differ among persons of different ethnic, religious and cultural backgrounds?

- Would the receipt of annual payments from the government cause changes in the attitudes of recipients towards governments, society in general, their own civic obligations (eg. their willingness to pay taxes)? In short, would the payments reduce alienation and improve understanding between different sections of society?

If it is decided to pay the Crow benefit to farmers, a unique opportunity will be created to conduct valuable social and economic research. Perhaps a small portion of the Crow benefit (eg. $100,000 - $250,000 per year) should be set aside to finance the social scientists as they set about the task of assessing the psychological, social, political and economic impact of what will truly be the greatest socio-economic experiment in Canadian history, and an experiment probably unique in the western world.

2. Output Projections from Past Studies

Agriculture Canada

Studies have been conducted in the past five years which attempted to predict the possible effects on agricultural output of the removal of the Crow rate. The studies used different assumptions and arrived at different conclusions. However, it may be noted that except for the study (studies) done by and for Agriculture Canada they project either a negligible or a negative impact on agricultural output and net income in western Canada. While there is no need to review these studies in detail, reference to them cannot be avoided because they attempt to answer

questions about output and impact which your Committee has been asked to consider, and because the Agriculture Canada studies in particular have been used to support arguments in favour of abolishing the Crow rate and of paying the subsidy to farmers rather than to the railways.

The three Agriculture Canada (AC) studies that may be mentioned are: Christmas Turkey or Prairie Vulture? by David R. Harvey who at the time (1980) was connected with the Department; "Agricultural Growth Potential for the West with Crow Rate Adjustment", Technical Working Paper produced for the Gilson consultations in 1982; and "Agricultural Impacts of Crow Change", Final Report, February 1983. All three are based on an econometric model of North American agriculture developed in the Department. A similar econometric model of North American agriculture was employed by Chase Econometrics (CE), a subsidiary of Chase Manhattan Bank, in its "Economic Analysis of the Proposed Policy for Revising Statutory Grain Rate Structures", completed in October, 1982.

Although their assumption of the transportation constraint has become irrelevant with the passing of the WGTA, it points to one of the more serious internal inconsistencies of the AC model. Since the model assumes that Canadian production has no effect on the export prices of grains, the logical result of a volume constraint on the transportation system would be a growing disparity between the export prices and the farm gate prices of the various grains, a phenomenon more commonly known on the Prairies as the difference between board and off-board prices. One would expect that this would be just as helpful to the livestock industry as would the difference between export prices and farm gate prices that would result from increases in transportation costs. It is difficult to

agree with Agriculture Canada's conclusion that a physical constraint on grain transportation would result in frustration and stagnation of grain production, stagnation of beef production and declines in pork production while financial constraints on grain transportation would have the beneficial effects of increases in the production of grain, beef and pork.

To illustrate the inconsistencies we may use the data from AC Final Report presented in Table 1.

Table 1

Comparison of Agriculture Canada Baseline and Pay-the-Producers Scenarios

	Baseline	Scenario GIII	Scenario CIII	Scenario AIII
Grain production (million t)	42.1	49.2	49.2	49.2
Rail movements "	31.0	39.4	39.4	39.4
Local use "	11.1	9.8	9.8	9.8
Weighted average export price $/t	426	426	426	426
Freight & handling charges $/t	39.46	83.33	89.10	84.80
Weighted average farm price $/t	386.54	342.67	336.90	341.20
Average price GIII,CIII, AIII		340.26	340.26	340.26

Source: Agriculture Canada - Final Report, 1983, Tables I, IV, XV, III-1, IV-1.

The first observation to be made is that in the baseline more grain is available for local use than in the other scenarios. This would imply that more grain would be fed to livestock, and that more livestock would be produced in the baseline scenario than in either of the three other scenarios. This is exactly

the opposite from AC's dire baseline predictions of sharply reduced livestock production.

It can be seen from the data in Table 1 that the average farm gate price in Scenarios GIII, CIII and AIII is $340 per tonne. Economic theory has it that at any given price the quantity that will be produced is uniquely determined at the point where the marginal cost is equal to the price. At $340 per tonne that quantity is 49.2 million tonnes. Obviously, the situation depicted in the baseline projection is not in equilibrium. At $386 per tonne farmers will want to produce more, not less than the 49.2 million tonnes they produce at $340 per tonne. If, because of constraints on the transportation system, only 31 million tonnes can be marketed outside the region, farmers will nevertheless expand production to the point where the combined markets outside and inside the region yield them the equilibrium price of $340 per tonne and the equilibrium output of 49.2 million tonnes. Thus there would be two separate markets which together would yield 49,200,000 tonnes x $340.26/t = $16,740,792,000. Since the external market would yield 31,000,000 tonnes x $386.54/t = $11,982,740,000, the local market would have to return $4,758,052,000. Spread over 18,200,000 tonnes, the average price in the local market would be $261.43 per tonne. Hence the equilibrium price in the local market would be $78.83 per tonne less in the baseline than in scenarios GIII, CIII and AIII. Thus the baseline would provide a greater stimulus to livestock production than the one assumed in those scenarios. Indeed, if one agreed with Agriculture Canada's objective of increased livestock production and if one accepted its assumptions of prices, meat consumption, access to the American market and grain production capacity, an artificial constraint on grain transportation might be the least cost solution, although its political feasibility would be questionable.

At any rate, it is obvious that the AC base line projection of high grain prices, volume constraints on grain transportation and a dearth of grain for livestock production in western Canada is internally inconsistent. Because all its other projections are measured against the base line, they are also invalid if they are expressed as changes or gains from the baseline. However, there may be some merit in comparing the results of the various scenarios among themselves and with the CE projections.

The CE projections are based on the Gilson recommendations and are comparable to AC projection GIII. There is substantial agreement between the two projections on 1990-91 grain prices, except for the rapeseed price which CE puts at $654 per tonne and AC at $540 per tonne at point of export, with farm gate values of $497 and $457 respectively. Grain production forecasts are virtually identical.

Projected livestock prices are identical to 1984, but for 1990 AC projects beef at $1.56/lb. and CE at $1.41/lb., while pork prices are projected by AC to rise to $1.73/lb. compared with CE's projection of $1.27/lb. AC projects western pork production at 329 million pounds in the "gradual approach", i.e. Gilson (465 million lbs. "immediate" approach) compared with the CE projection of 690 million pounds. Beef production figures are not strictly comparable; AC lists "steer and heifer slaughter" in the base line projection of 1,712,000 head in 1990 with increases of 116,000 head over base in the gradual approach and of 653,000 head in the immediate approach. CE lists western cattle marketings of 2,540,000 head, and exports 230,000 head and cattle slaughter of 2,311,000 head in 1990. If the AC figures are adjusted upward by 12% to take into account cow and bull slaughter, the gradual approach projection would be 2,050,000 head and the immediate approach 2,652,000 head.

The AC-GIII projection puts 1990 cash receipts from crops in western Canada at $13,042 million; CE at $15,796 million. AC livestock cash receipts are projected at $8,954 million, CE's at $8,199 million. The difference of $2,750 million in crop receipts which is only partly offset by $755 million in livestock receipts is difficult to explain considering the substantial similarity between the two projections of prices and outputs.

The CE projections do not provide a breakdown of farm income in western Canada for the year 1990, but do so for all of Canada. CE projects realized gross income of $42,889 million, total expenses of $34,406 million and realized net income of $8,483 million. AC-GIII projects realized gross income of $38,944 million, total expenses of $31,843 million, and realized net income of $8,395 million. Both estimates include the Crow benefit payments. Thus, the two projections arrive at almost identical net income figures although their estimates of gross income differ by $4,000 million.

The most significant difference between the AC and CE projections is in their baselines. AC's baseline projection of realized gross income is $6,000 million less than CE's, total expenses $4,000 million less and its realized net income $2,000 million less than CE's. Whereas CE projects gross income, expenses and net income under the Gilson formula to be virtually identical to its baseline, AC projects an increase of $2,000 million in net income over its baseline from the implementation of the Gilson formula.

It has been observed earlier that the CE baseline assumes no constraint on transportation and that the railway revenue shortfall resulting from the Crow rate will be made up by the

government and by revenue from the other railway traffic. The CE baseline, therefore, resembles the pay-the-railway option represented by AC scenarios EIII.

The significant differences between the CE baseline and EIII are:

- CE cash receipts from crops in western Canada are $3,260 million higher than in scenario EIII;
- CE livestock receipts in western Canada are $800 million lower than in scenario EIII;
- CE realized gross farm income in Canada is $4,000 million higher, expenses $2,665 million higher and net farm income $1,043 million higher than in scenario EIII.

Perhaps the difference in net income of between $1,000 and $1,300 million and the difference in cash receipts from western grain can be explained by the higher freight costs built into the EIII assumptions. The remaining differences in the projections are difficult to explain.

Finally, a few questions may be raised about the projected impact on gross and net farm income in western Canada of the five different scenarios as shown in Table V-4 of the Final Report.

The changes in grain receipts over the baseline in scenarios GIII to PIII differ by the differing freight costs assumed in Tables II-3 to II-7 and summarized in Tablae XV. The amount of grain shipped is assumed to be 39.4 million tonnes in each case. Since the estimated total production in each case is also assumed to be the same at 49.2 million tonnes, the question is what differences, if any, are assumed in the

disposition locally of the remaining 9.8 million tonnes. One would expect that the different numbers of livestock production projected in the scenarios would require different volumes of feed grains, but the model seems to have made no allowance for that. Thus the value of livestock production in scenario CIII exceeds livestock output in scenario EIII by $1,000 million, but the assumption seems to be that the volumes of grain consumed in the region are the same. One would also expect that grain producers would want to export larger amounts at a freight rate of $25 per tonne (PIII) than at $37 per tonne (EIII) and at $54 per tonne (CIII); yet the amounts are the same in all cases.

In presenting the impact on gross and net farm incomes in western Canada (Tables V-1 to V-4) no effort has been made to indicate the effects of the government contributions to the final results in the various scenarios. In all scenarios more than one half of the increases in net farm income over the baseline is accounted for by government payments, ranging from 52% in scenario AIII to 75% in scenario PIII. Finally, one gets a sense of upside-down logic when one observes that the AC projections indicate that the higher the freight rates paid by producers, the better off they are, both before and after the government contributions are taken into account.

Table 2

Agriculture Canada Projections of Net Farm Income
(Above baseline) Government Contributions, and Freight Rates

	1990 Senario				
	GIII	CIII	AIII	EIII	PIII
	Million Dollars (1990 dollars)				
Net Farm Income Above Baseline	1955	2075	1694	991	1694
Gov't Contribution (to railway & farmers)	1189.2	1189.2	886.9	682.0	1274.3
Net Income Without Gov't Contributions	765.8	885.8	807.1	309	419.7
Freight Rate Paid By Farmers	48.76	54.53	50.23	37.22	25.42

Source: Agriculture Canada, Final Report, Tables II-3 to II-7 and Table V-4

The relationship between freight rates and net farm income in the AC projections is unmistakable. Contrary to what one would expect, the relationship is directly proportional (and not inversely proportional). Except for the anomaly between scenarios EIII and PIII, every increase in freight rates leads to a proportionate increase in farm net income, whether the government pays any subsidy or not. Between Scenarios PIII and CIII freight rates more than double and net farm incomes more than double; moving from GIII to CIII, freight rates increase by 11.8%, farm incomes by 15.6%; between AIII and CIII freight rates increase by 7.9% and farm incomes by 9.8%.

The inescapable conclusion is that either the AC projections are fundamentally wrong or there is no need for the payment of subsidies at all. In the latter case, arguments about how the subsidy should be paid become somewhat unreal. The financial condition of the federal government is not such that it can afford to pay people in orde· to get them to accept a policy change which is good for them. There should not even be an argument about how quickly and how high the freight rates should be raised because the AC projections show that the 'immediate' approach gives more beneficial results than the 'gradual' approach, and that the higher the freight rates are raised the better it is for the farmers.

Our confidence in the AC econometric model is not sufficiently great to accept the latter proposition. It seems safer to remind ourselves of the warnings of the hazards of long range economic forecasting which typically accompany such projections (including Agriculture Canada's). Uncertainty increases with distance in the future, and the number of assumptions increases with increasing sophistication of the model. Assumptions which are critical to the model projections but which are particularly hazardous include future per capita consumption of meats, future prices of grains and livestock, railway cost increases, the general level of inflation and future yields of grain in the prairie region. It may further be noted that th. elasticities of supply responses to price changes of grains as well as livestock used in the model are particularly unreliable. Harvey (pp. 31-37) makes reference to some of their inadequacies, disagreement about their validity, and the need to make 'judgments'. The 1982 Agriculture Canada study admits that "... Neither the elasticity nor the income estimates are

unassailable" (p. 31), and in its discussion on pages 31-32 attempts to build its defences against expected challenges.

Our comments on the Agriculture Canada studies may be summarized as follows:

1) To the extent that the studies were aimed at undermining support for the Crow rate the studies are irrelevant; the Crow rate is gone and the WGTA has taken its place.

2) To the extent that the Final Report is intended to provide a source of information to be used in deciding on the 'best' method of paying the government subsidy it is faulty:

   a) The various scenarios are measured against a baseline that is unreasonable and unrealistic. The only reasonable baseline with which other options might be compared is the present WGTA, or given the timing of the study, Gilson's cost sharing formula with payment to the railways. It is strange that this wasn't done.

   b) Assuming identical volumes of grain shipments and exports with different freight rates and different volumes of livestock production is a fault in the logic of the model.

   c) The assumptions about inflation, grain and livestock prices, meat consumption and unrestricted access to the American market are very hazardous. Although some of the assumptions developed in 1978

were already far off the mark by 1982 they were nevertheless, retained in the model. The discrepancies have further increased in the past two years. Thus, for 1984, the assumed prices for beef are 25% higher than actual prices, hog prices 40% higher than actual, export wheat prices 40% higher and barley 30% higher than actual. Livestock production in Western Canada is significantly higher than estimated, and inflation is lower. The realization that such hazards are natural to forecasting should make us extremely wary of attaching significance to such projections in making policy decisions.

d) The supply response elasticities which are crucial to the model are unreliable.

Chase Econometrics

Reference has already been made to the study by Chase Econometrics (CE). Most of our reservations about the assumptions in the AC model apply to CE as well eg. inflation, grain and livestock prices, railway cost increases etc. CE is less confident than AC that Canadian beef will have unrestricted access to the American market and cautions that substantial numbers of cattle might have to be exported live. The most significant difference between the two studies is that the CE study concludes that the implementation of the Gilson recommendations would not produce results materially different from paying the railways. In Table IV-II on p. 85 of the CE report the 1982-1992 average annual cash receipts in Western Canada from crops are projected to decline by $604 million and livestock receipts to rise by $265 million, with the loss being made up by $363 million in government payments. In

eastern Canada the Gilson formula is projected to raise crop production by $45 million and reduce livestock production by $35 million over the baseline.

University of Manitoba

The objective of the University of Manitoba study conducted in 1979-1980 was to quantify the impact of changes in statutory grain rates and railway branch line configurations on production patterns and farm income in Manitoba. The study with which your Committee is undoubtedly familiar deserves attention because it is relevant to the issues at hand for a number of reasons;

1) its scenarios of transportation rates of 3.4 and 4.0 times Crow correspond to the freight rates in constant dollars that would result from the Gilson recommendations;

2) the study assumed instant and maximum response at constant prices; eg. perfectly elastic markets so that an increase in the supply of a product did not cause a decline in prices; on the part of producers the study assumed rational decision making aimed at profit maximization. As the authors put it, "The solution given by the L.P. model was a normative solution in that it gave the pattern of production which, if adopted, would have resulted in maximization of the net farm income."

   Under these optimum conditions the study projected a decline in the value of production of 40% in scenario II, a decline of 5% in scenario III and an increase of

0.4% in scenario IV. Net farm income declined in all three scenarios, in all regions of the province and for all sizes of farms. In scenario II the average decline in net farm income was 37%, in scenario III 47% and in scenario IV 29%.

Naturally, the study did not consider Crow benefit payments which would compensate for part or all of the losses. Our estimate of Manitoba's share of the Crow benefit payment under the Gilson and Westburn formula is $58.5 million. By comparison the University of Manitoba projected losses of net farm income expressed in 1984 dollars would be $51.5 million in scenario II, $55.5 million in scenario III, and $40.5 million in scenario IV. Hence the Crow benefit payments would have barely covered the losses in 1984, even under the optimum assumptions of the U of M study. It must further be considered that the Crow benefit is a fixed amount which will decrease in value over time, so that it will increasingly fail to cover the losses resulting from rising freight rates.

Norrie and Percy

In an article "Freight Rate Reform and Regional Burden: A General Equilibrium Analysis of Western Freight Rate Proposals" published in the Canadian Journal of Economics, Vol. XVI, 1983, Norrie and Percy conclude that an uncompensated change in grain freight rates would have a negative impact on agriculture and on other sectors of the western economy.

University of Alberta

The recently released study prepared for the Government of Alberta by a study team from the University of Alberta accepts "... the estimated changes in prairie beef and hog production which are projected to occur under the Gilson option (as prepared by Chase Econometrics) as being a most-likely scenario for Alberta ..." The authors go on to observe that these estimates are "broadly consistent" (their quotation marks) with Agriculture Canada's Final Report (p. 47). U of A then restates AC's projected impacts on net farm income in Alberta in "early 1980" dollars (1990 dollars deflated by 220%) and follows that up with "Estimated Impacts on Net Farm Income in Alberta for Alternative Crow Benefit Compensation Schemes" (Table 5.4, page 50). The different schemes are keep-the-Crow (no rail constraints), pay-the-farmer-annuity, pay-the-farmer cash loss compensation, Gilson, Double 80, UGG, and pay-the-railways. The simulation exercise yields nearly identical net farm income before Crow benefit for all scenarios, but because in the keep-the-Crow and pay-the-railways scenarios the farmers receive no Crow benefit payments, the adjusted farm net income figures differ by the amount of the Crow benefit.

There are a few anomalies in the U of A projection as shown below in the comparison of the pay-the-railways (WGTA) and the Gilson scenario.

Table 3

Comparison of WGTA and Gilson Scenarios in Alberta Study

Item	WGTA	GILSON	DIFFERENCE
	(millions of early 1980's dollars)		
Revenues			
Crops	2029	1848	181
Livestock	2095	2133	- 38
TOTAL	4124	3981	143
Expenses			
Selected	2058	1951	107
Interest	463	447	16
Depreciation	714	690	24
TOTAL	3235	3088	147
Net Farm Income	889	893	- 4
Crow Benefit	-	192	-192
Adjusted Net Farm Income	889	1085	-196

Source: University of Alberta study, Table 5.4, Page 50.

Attention may be drawn to the $192 million Crow benefit paid to farmers in the Gilson scenario. In the WGTA scenario of pay-the-railways, that $192 million is paid to the railways in order to reduce the grain transportation rates by that amount. Hence, grain receipts in the WGTA scenario would exceed grain receipts in the Gilson scenario by $192 million if farmers shipped identical amounts of grain. However, grain receipts differed by only $181 million; the conclusion must be that in the Gilson scenario farmers ship $11 million or about 55,000 tonnes more grain than they would under WGTA, a rather peculiar reaction to increased freight rates.

One would expect that having shipped more grain, farmers in the Gilson scenario would produce less livestock. However, the opposite is the case. The projections show livestock receipts in the Gilson scenario to be $38 million higher than in the WGTA scenario. That contradicts the logic of an agricultural production model.

Finally, one would expect farm expenses in the Gilson scenario (which is more livestock dependent) to be higher than in the WGTA scenario since it is a well known fact that livestock enterprises operate on a much narrower margin than grain enterprises. However, the University of Alberta projection shows farm expenses under WGTA to exceed expenses in the Gilson scenario by $147 million.

Our assessment of the U of A study is that its major conclusion that production patterns and net farm incomes would not differ much among the various scenarios is reasonable. However, the results of the simulation model intended to show the specific impacts of the various scenarios are unreliable.

Additional Observations on Output and Income Effects

In our opinion too much has been made of the so-called resource neutrality principle and the so-called distortion of agricultural production caused by the Crow rate; as a result some people have unrealistic and unwarranted expections of what the removal of the grain transportation subsidy might do for the livestock industry. If the issue is viewed in its historical perspective it is clear that there are neither grounds for dark pessimism nor reasons for overly high expectations for the future of the livestock industry in western Canada. The record is there to see for anyone who cares enough to review it.

First of all it must be realized that grain production was, is, and will be the dominant feature of prairie agriculture. Grain production will continue to be the primary use to which farmlands are put, and grain exports will continue to be the mainstay of our economy. Our preoccupation with efficient and low cost transportation will never cease.

However, the dominant position of the grain industry must not be viewed as being to the detriment of or opposed to the interests of the livestock industry, as it would seem some people are inclined to do. To a considerable extent grain production and livestock production go hand in hand, and many if not most, livestock producers are also grain producers. Through good times and bad, livestock production in Manitoba has grown alongside grain production. The record is indeed quite remarkable: in the 40 years since World War II the production of the 6 major grains has doubled, the number of cattle on farms has increased by 45% and hog production has quadrupled. All three branches of production have experienced booms and busts; sometimes they boom together but there have also been times that a boom in grain caused a bust in livestock production.

Table 4

Crop and Livestock Production
Manitoba 1941-45 to 1976-80

Period	Grain Production	Cattle on Farms	Commercial Hog Marketings
	ooo tonnes	ooo	ooo
1946-50	3249	768	290
1951-55	3391	758	367
1956-60	3448	890	469
1961-65	3534	1076	517
1966-70	4217	1078	797
1971-75	4892	1288	1205
1976-80	5441	1292	983
1981-84	0935	1095	1206

The record inspires confidence that the steady if unspectacular growth of the three branches of agricultural production will continue. At the same time the record provides no grounds for believing that a change in the method of pricing feed grains would send the cattle and hog industry on a steeper growth path. The price of feed grains might change by 10% to 13%, but changes of that magnitude have taken place in the past without causing any permanent shifts. The argument has been put forward (by Agriculture Canada and others) that an increase in grain transportation costs would be seen by livestock producers as a 'permanent' reduction. One look at the historical record of grain prices in western Canada will convince any reasonable person that price changes of more than ten per cent from year to year are more the rule than the exception. Unfortunately, livestock prices may change just as quickly and just as inconveniently. Again the record speaks for itself. Table 5 presents the prices of cattle, hogs and barley in Manitoba and the steer/barley and hog/barley price rates.

Rather than the level of feed grain prices it is the ratio of livestock and feed grain prices that is crucial in determining profitability. If one considers the wild swings in the price ratios one cannot but admire the perseverance and management ability of our livestock producers. At the same time, one must conclude that a 10% reduction in the barley price would have done nothing to reduce the year-to-year swings, and thus would have done nothing to increase the certainty and confidence of livestock producers.

On the other hand a change in the method of paying the Crow benefit which would result in a decrease in the price of feed grains could also have negative consequences for the livestock industry.

Table 5

Prices and Price Ratios of Livestock and Grain
Manitoba 1946-1983

Year	Good Slaughter Steers	Hogs	Barley	Price Ratios Steers/Barley	Hogs/Barley
	- - - Cents per Kilogram - - - -				
1946	26.5	39.4	3.58	7.40	11.00
1947	29.8	46.4	5.10	5.84	9.10
1948	40.4	61.6	4.50	8.98	13.69
1949	44.2	62.8	6.43	6.87	9.76
1950	53.9	61.2	5.24	10.29	11.68
1951	70.0	68.0	5.18	13.51	13.13
1952	52.8	53.9	5.10	10.35	10.57
1953	40.0	60.4	4.18	9.56	14.45
1954	38.4	61.4	4.23	9.08	14.52
1955	40.7	48.6	4.32	9.42	11.25
1956	39.5	51.6	3.77	10.48	13.69
1957	39.2	62.2	3.63	10.80	17.13
1958	48.4	55.6	3.72	13.01	14.95
1959	52.6	47.0	3.58	14.69	13.13
1960	47.8	47.7	3.86	12.38	12.36
1961	47.2	54.8	4.82	9.79	11.37
1962	54.8	56.6	4.59	11.94	12.33
1963	50.7	54.7	4.23	11.99	12.93
1964	48.2	51.9	4.69	10.28	11.07
1965	51.3	67.6	4.82	10.64	14.02
1966	55.6	73.7	5.05	11.01	14.59
1967	59.3	60.7	4.09	14.50	14.84
1968	59.2	62.0	3.63	16.31	17.08
1969	64.2	78.2	3.17	20.25	24.67
1970	66.6	64.4	3.67	18.15	17.55
1971	72.4	50.4	3.58	19.94	14.08
1972	77.3	75.0	5.79	13.35	12.95
1973	96.0	113.1	11.53	8.33	9.81
1974	104.6	101.7	10.29	10.25	9.97
1975	89.5	137.9	10.47	8.55	13.17
1976	78.1	130.1	9.19	8.50	14.16
1977	80.4	125.2	7.58	10.61	16.52
1978	118.6	149.5	7.76	15.28	19.27
1979	153.5	141.5	10.33	14.86	13.70
1980	151.7	124.9	14.01	10.83	8.92
1981	168.4	148.6	11.48	14.67	12.94
1982	165.7	177.7	9.10	18.21	19.53
1983	159.9	151.0	12.00	13.32	12.58

The immediate impact of an increase in freight rates might be that the average price of statutory grains would decline by $12.56 per tonne. Considering that the weighted average price of statutory grains received by Manitoba farmers at delivery to elevators in the summer of 1984 was about $152.50 per tonne, the price decline would be in the order of 8.2 percent. A price decline of that magnitude is likely to have a negative impact on output; it seems reasonable to assume that there would be a decrease in the purchase of fertilizers and pesticides and a drop in average yields. The increase in land value due to the Crow Benefit entitlement would be offset by the decrease resulting from the lower value of production. If the Crow entitlement is restricted to existing improved land there may be a slowdown in further land improvements. Because the price decline would be relatively greater for oats, barley and rye there would likely be a shift in production from coarse grains to wheat and oilseeds. If the average 1976-80 yields are taken as representative and applied to mid-1984 prices the reduction in revenues from the six principal grains would be as follows:

Table 6

	Yield t/ha	Price $/t	Revenues $/ha	Revenues Increased Freight $/ha	Revenues After Decline $/ha	Changes %
Wheat	1.822	157	286	22.90	262	8.1
Oats	1.853	100	185	23.29	160.50	12.6
Barley	2.317	110	255	29.12	255.88	11.4
Rye	1.701	90	153	21.38	131.62	14.0
Flax	.886	300	266	11.14	254.25	4.2
Rapeseed	1.166	350	408	14.66	392.50	3.6

The relatively sharp decline in the price of coarse grains could result in a reduction of feed grain production to the extent that shortages would develop and local feed grain

prices would exceed the prices offered at the elevators for export sales. This would signify a return to the conditions of the mid 1960's when local feed grain prices in southern Manitoba were consistently higher than the CWB prices. That phenomenon was (also) caused by a sharp reduction in the area planted to barley as can be seen from the following data on planting:

Area Planted to Barley, 1941-1980
000 ha (average for 5 year periods)

1941 - 1945	776
1946 - 1950	692
1951 - 1955	879
1956 - 1960	569
1961 - 1965	240
1966 - 1970	463
1971 - 1975	773
1976 - 1980	696

If a drop in barley production of a magnitude similar to that of the 1960's should occur in Manitoba, the expected beneficial impact on livestock production from a change in the method of payment would not materialize.

IV. Impact on Processing

An increase in the level of livestock products could be expected to cause an increase in the level of meat processing activity. Based on historical trends we expect a slow but continuing increase in the production of cattle and hogs. Our stabilization programs for beef and hog producers are aimed at minimizing the effects of cyclical downturns which have characterized livestock production in the past, but unless there is a much stronger commitment to agricultural stabilization on the part of the federal government, it would be too much to expect that we would be able to eliminate the cyclical downturns completely.

In our opinion, growth of the livestock industry will not be affected, or only marginally so, by directing the payment of the Crow benefit to the farmers rather than to the railways. A change in the method of payment would, therefore, have no perceptible impact on the meat packing industry which is passing through a process of adjustments, a process which has caused thousands of workers in all parts of the country to lose their jobs.

Changing the method of payment would not improve the competitive position of grain and oilseed processors. Flour, malt and linseed cake and meal were always covered by the statutory rate. Since Schedule I of the WGTA now includes the oil and meal processed from canola-rapeseed, flaxseed and sunflowerseed as grains a change in the transportation costs would equally affect the seed and the processed products. Our major concern is the maintenance of the MCR beyond Thunder Bay for the shipment of canola and linseed oil and meal, and extending the MCR to sunflower oil and meal.

V. Impact on Major Farm Inputs

The purpose of paying the Crow benefit to farmers is to lower the price of grain at the farm level. If that were done the marginal and average revenue per acre would decline and the marginal cost curve would intersect the marginal revenue curve further to the left. In plain language, it is rational to reduce inputs when the price is reduced. It follows that lower farm gate prices will tend to cause a decline in the demand for the major farm inputs such as fertilizers, pesticides, fuel and farm machinery. The crisis in the farm machinery industry now in its fifth year and the serious difficulties encountered by some of the fertilizer companies in western Canada provide evidence that farmers do respond to reduced grain prices by reducing their demand for major inputs.

VI. Impact on Transportation and Handling

In preceding sections of this submission we have had occasion to refer to the link between method of payment, variable rates, elevator closings and branch line abandonment. A few additional comments may be made on this link which in our opinion is the most important issue in the debate over the method of payment.

Proponents of a change in the method of payment have argued that the Crow Benefit should be paid to producers so that the grain shippers could exercise more choice between the modes of transport - truck or railroad. They suggest that more choice among shippers will result in greater competition between the modes and a more efficient transportation system. A careful examination of the idea exposes its fallacies.

Railroads have an inherent true cost advantage over truck transport for the long distance hauling of grain. Paying a diluted fraction of that amount to grain shippers will not alter that fact. The railroads will definitely retain their cost advantage over truck transport for distances exceeding 500 kilometres. Trucking cannot compete with rail transport to export terminals, and eventually all grain destined for export will be moved by the railway system.

As far as short distance hauls are concerned, the major flaw in the case for producer payments is that the true comparative costs of truck transport are not apparent to those choosing among the modes. The highway network is not costed in the same manner as the railroad network and users of the road network are not charged the full costs. Identifiable commercial trucking rates do not reflect the true costs of truck transport. Farmers are reputed to not even recognize costs identified by commercial operators such as time spent, depreciation, etc. They do not perceive their trucking activity as separate from the farm operation. Thus, comparison of

perceived trucking costs with rail rates approaching or exceeding true costs can only mislead farmers to make incorrect decisions about the economically efficient mode to transport grain. A producer payment coupled with the suggestion that funds could be used to underwrite trucking costs will only obscure the appropriate price signals further and induce more farmers to make an incorrect choice.

The extra trucking encouraged will not only be economically inefficient in the short run, but the increased use of larger trucks over a bridge and road network not designed to handle such traffic will also generate overinvestment in the provincial highway system.

It is ironic that those who use the phrase 'resource neutrality' and express concern about economic distortions when discussing agriculture cannot appreciate the harm the payments to producer scheme would have on the transportation system.

As for the argument that farmers could use the payments as a leverage to compel the railroads to provide better service at a particular delivery point, their ability to do this is limited. First, the payment may not be sufficient on a per delivered tonne basis to compensate for the extra haul to a delivery point on the other railroad's line. Second, the railroads are likely to provide poor service to those points which they are reluctant to serve at all and consequently the farmer's ability to go elsewhere is no threat, but serves the railroads' interests.

The overriding concern on transportation policy should be the rational allocation of resources between the different modes of transport. We cannot even begin to allocate resources rationally among the various modes unless we have common or identical methods of measuring the costs of the various modes. Without a common

accounting method no rational comparison between the costs of road and rail transport can be made. Yet it seems that no such common method is ever employed in discussing the merits of one mode over another.

One side benefit of the long and bitter dispute over the cost of transporting grain by rail has been the development of costing methods and the acceptance of certain costing principles by the railways, the major shippers and the Government of Canada. Among the costing principles that may be applicable in estimating the long run costs of the provincial road system are the concepts of "normalized maintenance", the cost of capital and the "contribution to overhead".

Including the latter two factors in the cost of the provincial highways system would raise the total costs by many hundreds of millions of dollars. If the highway users were charged the full user costs, user charges in the form of registration fees and fuel taxes would have to increase many times. Even then the costs of the municipal road systems would not have been taken into account.

If measured by railway costing methods, it is obvious that road transport in Canada is subsidized on an enormous scale by provincial governments and local authorities. To the extent that the WGTA makes rail transport fully compensatory while road transport is not, traffic is and will be diverted from rail to road. The WGTA has made the imbalance between rail and road even greater than it was, and adopting the pay-the-farmer scheme will bring us further from the goal set in the National Transportation Act, namely to make the best use of all available modes of transportation at the lowest total cost.

SUMMARY AND CONCLUSION

The WGTA was enacted by the Parliament of Canada to "facilitate the transportation, shipping and handling of western grain...". The WGTA is a transportation act, and the funds appropriated by Parliament under the Act are applied to assist in defraying the costs of transporting western grain. The various schemes that have been put forward in recent years to distribute the funds in other ways are not consistent with the Act. In effect, the proponents of these schemes advance the proposition that there are better ways to spend that money; some go so far as saying that subsidizing transportation is harmful. Yet they claim to have an 'entitlement' to the money provided in the WGTA on the grounds that it compensates for a benefit lost when the Crow rate was abolished. One may wonder how the repeal of a privilege that was harmful or not helpful can give rise to claims for compensation. We are afraid that if the funds were distributed in western Canada for purposes other than to assist in the transportation of grain, the recipients of those funds and those who represent them in parliament would be asked by other groups in society to explain the purposes of the grants, to what uses the grants were put and what priority should be attached to those grants relative to other demands made upon the public treasury. We would expect those questions to be raised with growing urgency as the years pass by, and we would expect the answers coming from the recipients to become less convincing with every passing year. In our opinion, the Canadian public will continue to view public assistance to transport western grain to export markets as reasonable; we doubt that the public will consider it equally reasonable to send, year after year, large sums of money to individuals who do not have to demonstrate the need for it or the purpose to which it will be put.

We have no hesitation in stating that the so-called resource neutrality is a phoney issue. By definition, supporting any person or cause means that one is not neutral towards the interest of the person or cause.

Support for grain producers must not be construed as lack of support for or hostility towards livestock producers. While it may be argued that an increase in transportation rates would cause a decrease in local grain prices, we can state categorically that the existence of the Crow rate has never been the deciding factor or even a significant factor in the profitability or unprofitability of livestock production. The historical record of prices of livestock and feed grain shows that the prices of both fluctuate so frequently and so widely that the presence of a 10% upward bias in the price of feed grain is insignificant.

In our opinion the payment of the subsidies directly to the railways is the best way to ensure the efficient operation of the transportation system. Payment to the railways lowers the rates, encourages use, increases the volume handled and thereby reduces costs per unit, which is the standard definition of efficiency. If the subsidy is paid to farmers independent of their use of transportation services, the higher transportation rates discourage use of the transportation system, lower the volume handled and increase the costs per unit. Hence payment to farmers reduces efficiency of the transportation system.

We realize that if the Crow benefit were paid to farmers and if transportation rates would be raised in consequence thereof, farmers as grain shippers would become more sensitive to variable rates. This would enhance the flexibility of railway management to employ variable or incentive rates to encourage the use of some delivery points and to discourage the use of others. Changing the method of payment of the Crow benefit would thus become a powerful instrument in the hands of the railway companies to cause the abandonment of branchlines, the closure of elevators and the demise of some rural communities. Indeed, we are well aware of the fact that there are many who consider the combination of payment-to-farmers and variable rates as indispensible toward "streamlining and rationalizing" the railway system.

It needs hardly to be emphasized that the Government of Manitoba does not subscribe to this view of efficiency and is strongly opposed to the manipulation of public funds in order to achieve the dismantling of part of the transportation system which those funds were meant to improve and maintain. It may well be that the railways can move 20 million tonnes of grain through 50 or 100 delivery points more efficiently than 35 million tonnes through 1000 delivery points, and that railway management aims to achieve the leaner system. However, such gains in railway efficiency would be made at the expense of the rural communities and would be contrary to government policy objectives of increasing output and income from agricultural production.

A substantial part of our submission has been devoted to discussing studies done by Agriculture Canada purporting to show that ending the Crow rate and/or paying the Crow benefit to farmers would be beneficial to all groups concerned. We are confident that we have proven that their assumptions were shakey, their logic faulty and their conclusions unwarranted and unreliable. We have drawn attention to the fact that Agriculture Canada's findings are at variance with the findings of studies conducted by the University of Manitoba, Chase Econometrics and others. We wish to re-emphasize that the projections obtained through the econometric models are predicated upon so many assumptions that their reliability approaches zero.

Based upon the record of performance of Manitoba's grain, cattle and hog sectors through good times and bad, we can say with confidence that continuing to pay the subsidy to the railways as provided for in the WGTA will not seriously affect the viability and growth of our livestock industry, and that paying the Crow benefit to farmers would have no significant impact on the overall output of Manitoba's agriculture. Straight grain producers would lose some; straight livestock producers would gain some; farmers who feed all of the grain they produce to their own livestock would be unaffected. However, we do not think that the once-for-all drop in grain prices would be

sufficient to provide a lasting stimulus for expansion of livestock production. Profitability of beef and hog production would only be marginally affected and the change would not bring what the industry needs most: stability.

We have been concerned that claims regarding the potential impact of a change in the method of payment were highly exaggerated, and might tend to raise false expectations. They also might tend to create division between grain producers and livestock producers. We think that it is unfortunate, and we see it as our duty to promote information that puts the issue in perspective.

We are also seriously concerned that cutting the subsidy loose from grain transportation may threaten its permanence. We think that producers should take that possibility into consideration.

Finally, the Government of Manitoba has very strong views on the maintenance and protection of railway branch lines. We will oppose any attempts to use the method of payment in combination with variable rates to force the closure of elevators and the abandonment of branch lines.

The Government of Manitoba is conscious of the fact that the WGTA is an act of the Parliament of Canada and that Parliament has the undisputed prerogative to appropriate funds and to decide on the method of their distribution. We appreciate being invited to express our opinion on the method of payment of the Crow benefit. Having weighed all of the relevant factors, and having taken into account the long run interests of the grain and livestock producers of this province, we recommend that the payment of the Crow benefit continue to be made as presently provided for in the Western Grain Transportation Act.

APPENDIX

The Westburn proposal and Manitoba government estimate of "slippage"

Basically the Westburn proposal is as follows:

1. Pay 20% of the Crow benefit direct to the railways;

2. Pay 80% of the Crow benefit to producers on the greater of:
   a) his average deliveries in the period 1977-78 to 1981-82 upgraded by 10% to the 1981-82 base;
   b) the productive capacity of the land he presently farms.

3. Because the (either a or b) provision raises the total, supplementary payments are necessary.

Most of the calculations in the proposal are concerned with estimating the magnitude of the supplemental payments which may be required. Similarly, some confusing statements and inconsistencies result therefrom.

For example, the table on supply and disposition of western grains shows, 7,434,000 tonnes going to feed waste and dockage, 17.5% of production. In the text, the statement is made that "Any of this production that is consumed on the farm on which it is produced would not contribute to slippage as the producer would receive his benefit by virtue of being a consumer of his own production". The paper goes on to say that estimates of such on-farm consumption vary from 40% to 75%, and that, therefore, the maximum slippage can be bracketed between 2 and 4 million tonnes.

It may be noted that Gilson used the full 8 million tonnes of on-farm use to make his estimate of the agricultural adjustment payments. It may further be noted that in both Approach 1 and Approach 2 of the Westburn calculations to estimate the supplementary funding required, the issue of on-the-farm consumption is ignored.

In essence, Westburn treats each crop district as one farm and compares its shipping to production ratio with the average for the prairies (.717). The underlying assumption appears to be that actual production of the six crops is a proxy for productive capacity, and the difference between production and shipment is a proxy for on-the-farm consumption plus local processing use. Since there may be only winners, those crop districts with a lower rate do not lose any subsidy while those with a higher ratio receive supplementary payments. Westburn admits that the estimate of $24 million supplementary funds in Approach 1 is low.

In Approach 2 the cropland in each crop district is adjusted by means of a productivity index relative to the average yield factor for the prairies; the resulting production potential proportionate to total prairie production of 30 million tonnes is then subtracted from the 1981-82 shipments. Those crop districts which shipped more than their proportionate share would have received supplementary payments. The paper arrives at an estimate of $57 million, which is considered to be the maximum.

Perhaps the chief criticism of the Westburn paper must be directed at the assumption of supplementary payments necessitated by the either/or proposition. The assumption goes far beyond the Gilson proposition which "only" provided for interim adjustment payments to cover the consumption of grains in the Prairie regions.

The Westburn proposal on the other hand assumes no diminution of entitlement based on actual shipments over the 1977-78 to 1981-82 period enhanced to the 1981-82 level and supplemental payments to cover what can be produced on land not devoted to statutory grain as well as on grain produced but not shipped, hence, consumed in the region.

As to the methods of estimating the shortfall, both approaches in the Westburn paper probably come up with a low figure, even though the $57 million figure is called maximum.

- If one takes 7.4 million tonnes feed/waste and supplements it with the 80% Crow benefit per tonne of $16.75 one arrives at a cost of $123.75 million;

  Even if one made consumed-on-the-home farm ineligible (for which there is no logical reason and no effective administrative control mechanism), one would still require supplemental payments of more than $60 million.

- In addition, one would have to consider land devoted to crops other than statutory grain.

  According to 1981 census data 37 million hectare of land in Manitoba, Saskatchewan and Alberta were under crops, in summerfallow and in improved pasture. If that is taken as the land base and if 80% of the Crow benefit (or $526 million) is paid to farmers on that land base, farmers would receive on average $14 per hectare per year. Of the 37 million hectares improved land 30 million hectare are used to produce statutory grain (as defined in the WGTA) including summerfallow. On average about 73% of the grain produced moves through the grain handling and transportation system. Thus, only about 22.5 million hectare or 61% of the 37

million hectare land base are devoted to producing the grain that moves through the grain handling and transportation system, and 39% of the Crow benefit would go to support activities unrelated to grain transportation if the payments were made to farmers.

The calculation is shown below.

	Improved area (ha)		
Manitoba	5,503,980		
Saskatchewan	19,683,855		
Alberta	12,525,481		
British Columbia	377,230		
Total	38,090,546		
			38,090,546
Of which "other" (yards etc.)			708,919
			37,381,627
Area in pasture		2,959,990	
Area in hay, silage, and crops other than grain		3,347,419	
Total not grain related		6,307,409	6,307,409
Area in grain and summerfallow			31,074,218
Average proportion of grain not marketed - 27.6%			8,452,187
Area devoted to WGTA grain			22,622,031

Percentage of cultivated land base 60.5%

Cultivated area unrelated to grain transportation 39.5%

Crow benefit which would flow to agriculture not related to transportation (.395) (.8) ($658,600,000) = $208,117,600

Average Crow benefit payment per hectare

$$\frac{(.8)\ (\$658,600,000)}{37,381,629\ \text{ha}} = \$14.09/\text{ha}$$

Average intended Crow benefit per tonne of grain shipped:

(1981-82 basis)

$$\frac{(.8)\ (\$658,600,000)}{31,500,000\ \text{t}} = \$16.73/\text{t}$$

POOR

QUALITY

ORIGINAL